PBS software

# PBS archive add on

# CPS

Project Systems

**Manual Part C**

**- User Manual -**

Compatible with

SAP ERP 2004

SAP® Certified
Powered by SAP NetWeaver®

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# Introduction to the PBS ILM Concept

## Information Lifecycle Management

Information Lifecycle Management (ILM) means the administration of information related to the time when it is used, taking into account its total costs and compliance. A conclusive, efficient ILM concept must, as a result, control data growth, manage retention rules, and also ensure compliant data storage. Furthermore, an easy access to archived data is decisive and, for example, its transfer during internal and external audits.

## PBS ILM Concept

PBS software provides existing SAP customers extensive solutions to put into practice the requirements that were described above for a stringent and successful ILM concept. PBS is considered as an expert for complex, integrated data accesses to archived and database data and meanwhile, also to data that is located on decommissioned SAP systems. In addition to classical SAP data archiving, SAP BI-specific nearline storage is also supported.

## PBS archive add ons®

PBS archive add ons always rely on SAP archiving having been carried out successfully. This is the basis for a permanently high-performing SAP system. In principle, you can indeed retain posted documents in the SAP database for a very long time due to a large database capacity. Depending on the document volume, this may result, however, in massive performance losses and, sooner or later, heavily increasing operation costs. The daily backup becomes difficult for large data stocks, for example.

A convenient display and evaluation of archived transaction data – as the SAP user is used to for database data – can often only be carried out in a very restricted manner using SAP standard means depending on the application module. This is particularly the case for large archive data stocks. The PBS archive add ons can be used here. They can be provided for nearly all SAP modules and release levels, and start with a "C" (for Complete) in their description. For example, PBS archive add on CCOPA for the SAP module COPA.

Using the PBS archive add ons you can quickly and easily access your archived data even after data archiving during your day-to-day business. The unrestricted data access is realized by an intelligent indexing concept. It extends the SAP archive infrastructure components and integrates itself optimally with SAP archiving. Archive data that has been indexed can still be provided after a release upgrade immediately, without restrictions, and without migration effort. The PBS archive index is stored in sequential files of the SAP file system in the same way as the SAP archive data. Afterwards, you can access the archive data online via the familiar transactions. The SAP user can display the data from the SAP database and the archive data simultaneously via the PBS archive add on index. For the user, it seems as though the archived data is still in the SAP database.

The deep integration of the PBS transactions also enables direct navigation to subsequent and previous documents both within the indexed SAP module as well as to linked documents from other SAP modules. This applies not only for resident but also without restrictions for archived data. The benefit for the user increases the more PBS archive add ons are used.

The potential benefits of the ILM concept raises substantially if you take into account the savings that result from the SAP mirror systems. There are usually at least two of them meaning that the saved disk storage can be tripled by

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# 1 Introduction

The **PBS archive add ons** are constructed in modular form and cover the application modules FI, SD, MM, CO etc. with a special program package for exactly this application. You can easily see from the name which PBS archive add on belongs to which SAP module: CFI, CSD, CMM, CCO etc. All PBS archive add ons have in common that they can be easily installed in the SAP system via the SAP transport utilities **"tp"** and “SAINT”. For installation details of the PBS archive add ons please see the specific installation manual (manual part A).

This manual on the display transaction and application programs was written to support you when using the PBS archive add on CPS. Please see the administration manual (part B) regarding construction and administration of the PBS archive add on CPS.

The modular user manual of each PBS archive add on is composed of partial manuals:

- Part A: Installation
- Part B: Administration, Archive Construction and Maintenance
- Part C: Application Programs / Transactions

There are additional manuals for the PBS utilities: Conversion Tool, Archive Browser, Translation Tool.

Should you have questions regarding the installation of the PBS archive add ons or if you have problems when installing the software please call directly the **Service Hotline of PBS Software GmbH**:


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**Release Compatibility**

The **PBS archive add on CPS** discussed in this manual runs with the basis programs of SAP AG, 69190 Walldorf/Baden, Germany for the **SAP ERP 5.0/6.0** solution.

# 2 Application Functions

## 2.1 Navigation in the PBS archive add on CPS

From the Easy Access menu you can easily navigate via the button 'User menu' through the functions of the PBS archive add on CPS. This is possible when your system administrator has added the role to your user profile.

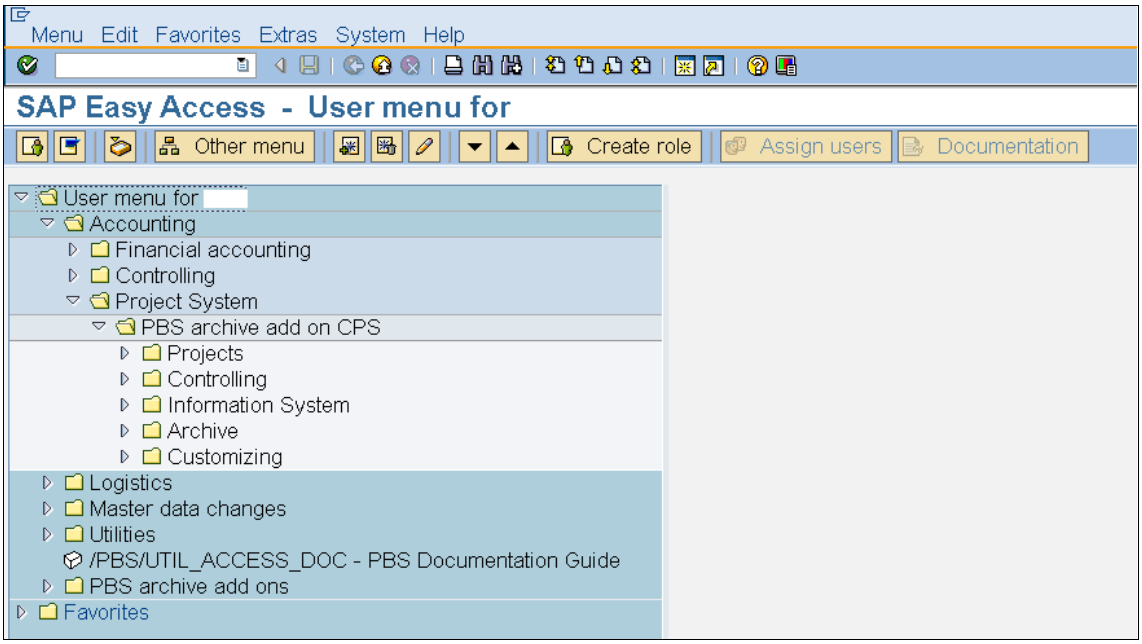


**Diagram 1: Navigation via the SAP Easy Access**

## 2.2 Display Transactions

With the current version the following display transactions for the PBS archive add on CPS are available which read project data from the operative PS tables of the SAP system as well as from the PBS index. In general, these functions can also be called via the PBS navigation helps described above.

In principle, the display transactions correspond in their functionality to the corresponding SAP transactions. Therefore, special training for users is not necessary. You can find the detailed description of the transactions in the SAP documentation.

| PBS | SAP | Transaction description | 5.0 | 6.0 |
|---|---|---|---|---|
| /PBS/CJ20N | CJ03 | Project Builder | X | X |
| /PBS/CJ03 | CJ03 | Display Work Breakdown Structure | X | X |
| /PBS/CJ08 | CJ08 | Display Project Definition | X | X |
| /PBS/CJ13 | CJ13 | Display WBS Element | X | X |
| /PBS/CN23 | CN23 | Display Network | X | X |
| /PBS/CN28 | CN28 | Display Network Confirmations | | X |
| /PBS/CJ31 | CJ31 | Display Project Original Budget | X | X |
| /PBS/CJ41 | CJ41 | Display Project Plan | X | X |
| /PBS/CJ43 | CJ43 | Display Project Revenues | X | X |
| /PBS/CN41 | CN41 | Structure Overview | X | X |
| /PBS/CN42N | CN42N | Overview: Project definitions | X | X |
| /PBS/CN43N | CN43N | Overview: WBS elements | X | X |
| /PBS/CN46N | CN46N | Overview: Networks | X | X |
| /PBS/CPS_CJIA | CJIA | Project Actual and Commitment Paymt LIs | X | X |
| /PBS/CPS_CJI3 | CJI3 | Project Actual Cost Line Items | X | X |
| /PBS/CPS_CJI4 | CJI4 | Project Plan Cost Line Items | X | X |
| /PBS/CJI5 | CJI5 | Project Commitment Line Items | X | X |
| /PBS/CJI8 | CJI8 | Project Budget Line Items | | X |
| /PBS/CJI9 | CJI9 | Project Struct.Pld Costs Line Items | | X |
| PBS/CJE0 | CJE0 | Execute Hierarchy Reports | X | X |
| /PBS/CJEB | CJEB | Background Processing, Hierarchy Report | X | X |
| /PBS/CJEY | CJEY | Reorganize Report Data | | X |
| /PBS/CPSE | GR55 | Execute Report Group | X | X |

**Table 1: Display transactions of the PBS archive add on CPS**

# 2.3 Display Data Source

The display transaction dynpros in the PBS archive add on CPS are extended by the field "ARCH." (Archive) that displays information about the origin of the data.

An indicator (*) in the field "Arch." displays that the data was determined from the archive. If the field is empty, the data is accessed to the SAP database.

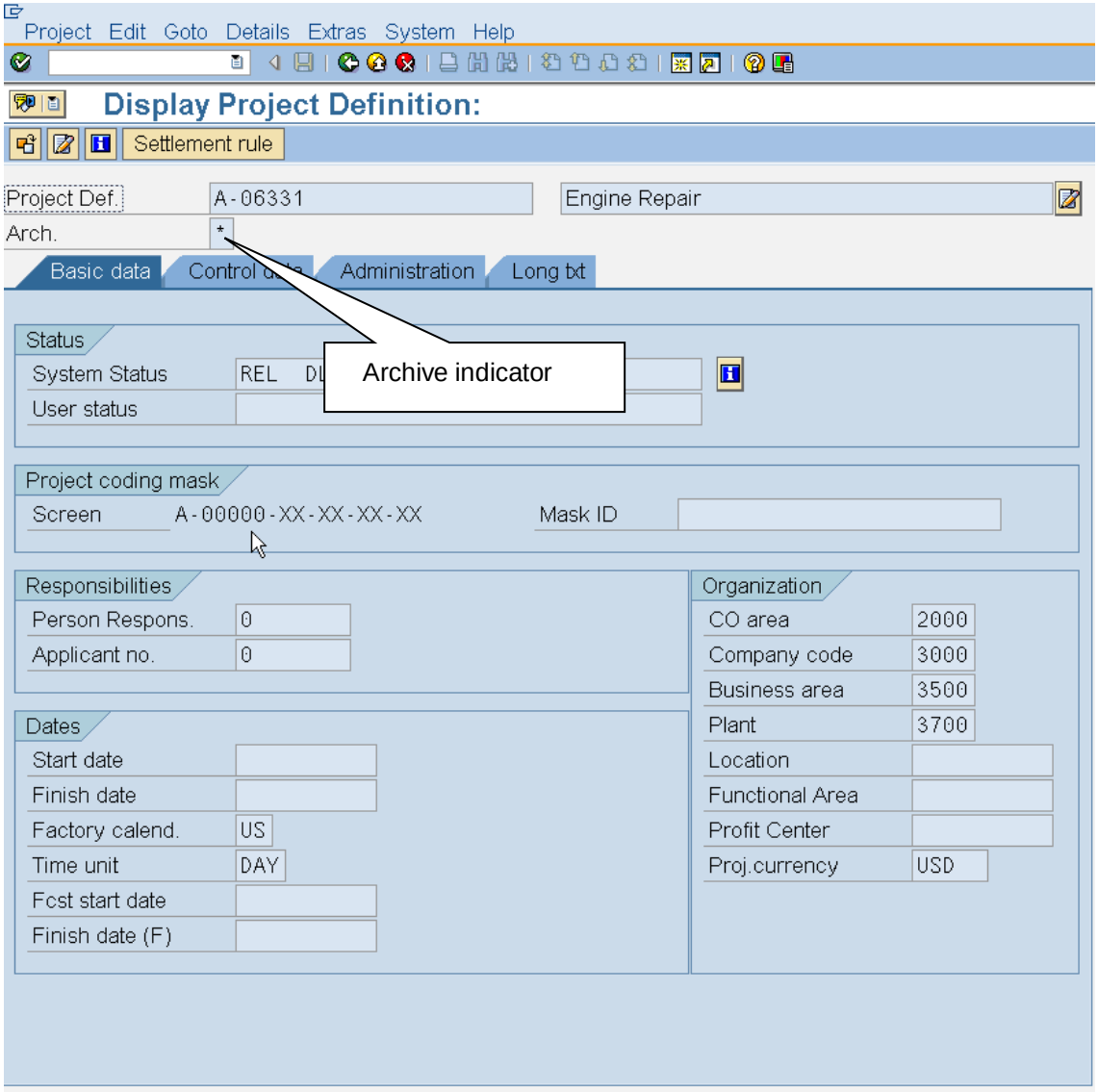


**Diagram 2: Display data source**

# 2.4 Selection of the Data Source for List Displays

In the selection screen, the PBS display transactions differ from the SAP original by the text in the window title and the parameter to select the data source

**1=DB+archive**

**2=DB**

**3=archive'**

By entering the appropriate number 1, 2 or 3 project data is displayed either from the SAP database, the archive or from both data sources.

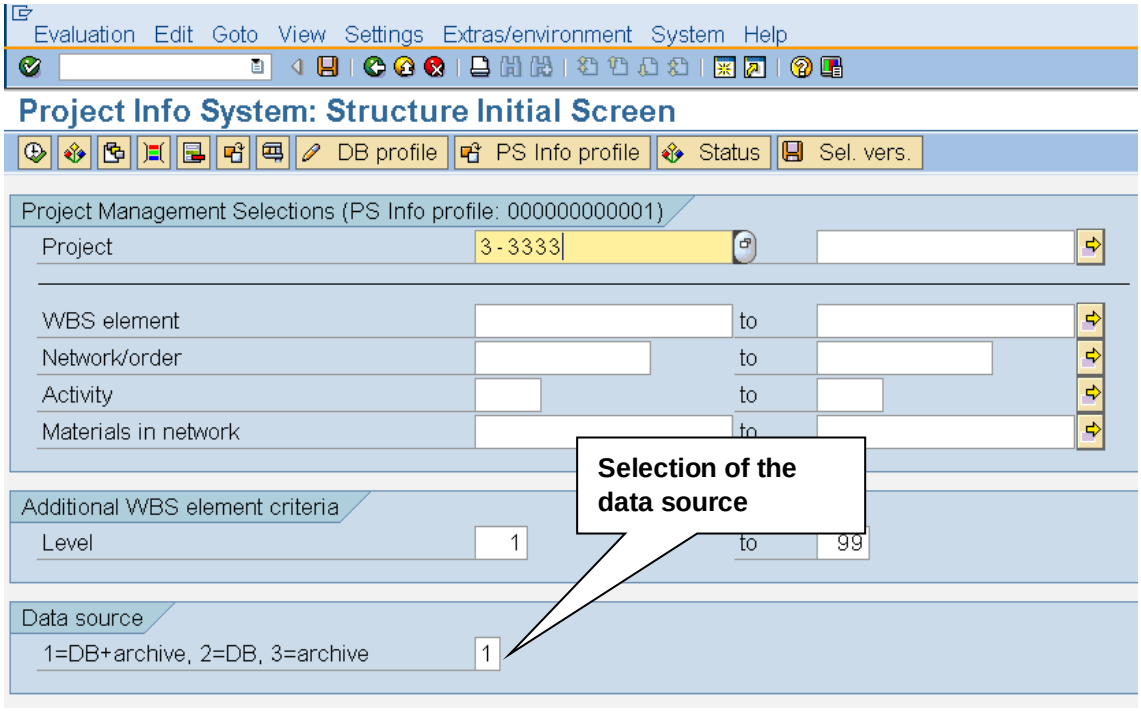


**Diagram 3: Selection screen of transaction /PBS/CN41**

If all delimitations have been entered correctly, a list with the requested projects is displayed. The list screen is constructed identically to the SAP transactions, but extended by a column with the archive indicator (A). With this indicator you can see whether the project displayed is in the PBS archive add on CPS or in the SAP database. If it is in the archive, the column contains a '*'. Otherwise it is empty.

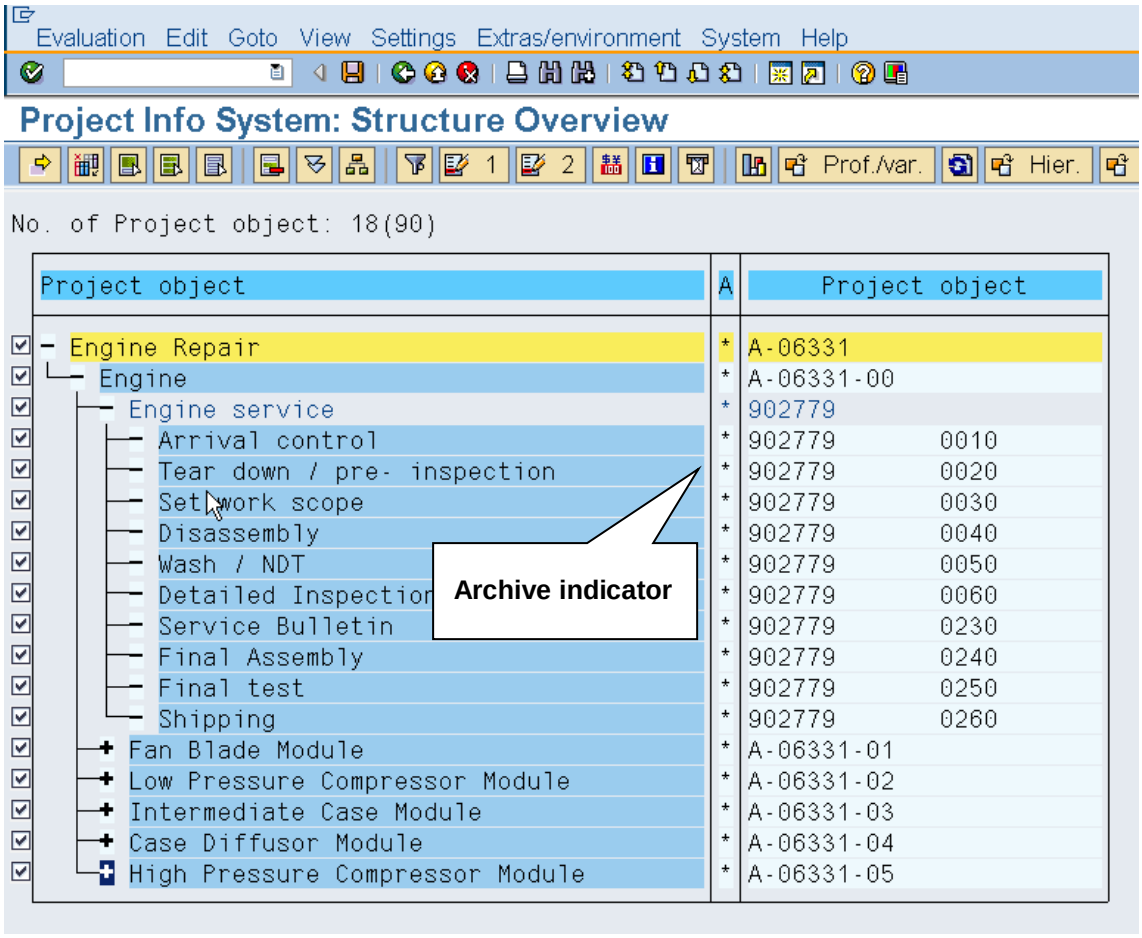
Evaluation Edit Goto View Settings Extras/environment System Help
Project Info System: Structure Overview
Prof./var.
Hier.
No. of Project object: 18(90)
Project object
A
Project object
Engine Repair * A-06331
Engine * A-06331-00
Engine service * 902779
Arrival control * 902779 0010
Tear down / pre- inspection * 902779 0020
Set work scope * 902779 0030
Disassembly * 902779 0040
Wash / NDT * 902779 0050
Detailed Inspection * 902779 0060
Service Bulletin * 902779 0230
Final Assembly * 902779 0240
Final test * 902779 0250
Shipping * 902779 0260
Fan Blade Module * A-06331-01
Low Pressure Compressor Module * A-06331-02
Intermediate Case Module * A-06331-03
Case Diffusor Module * A-06331-04
High Pressure Compressor Module * A-06331-05
Archive indicator

**Diagram 4: List Display**

# 2.5 Project Builder

From Release 4.C the Project Builder (transaction /PBS/CJ20N) is available with the following selections:

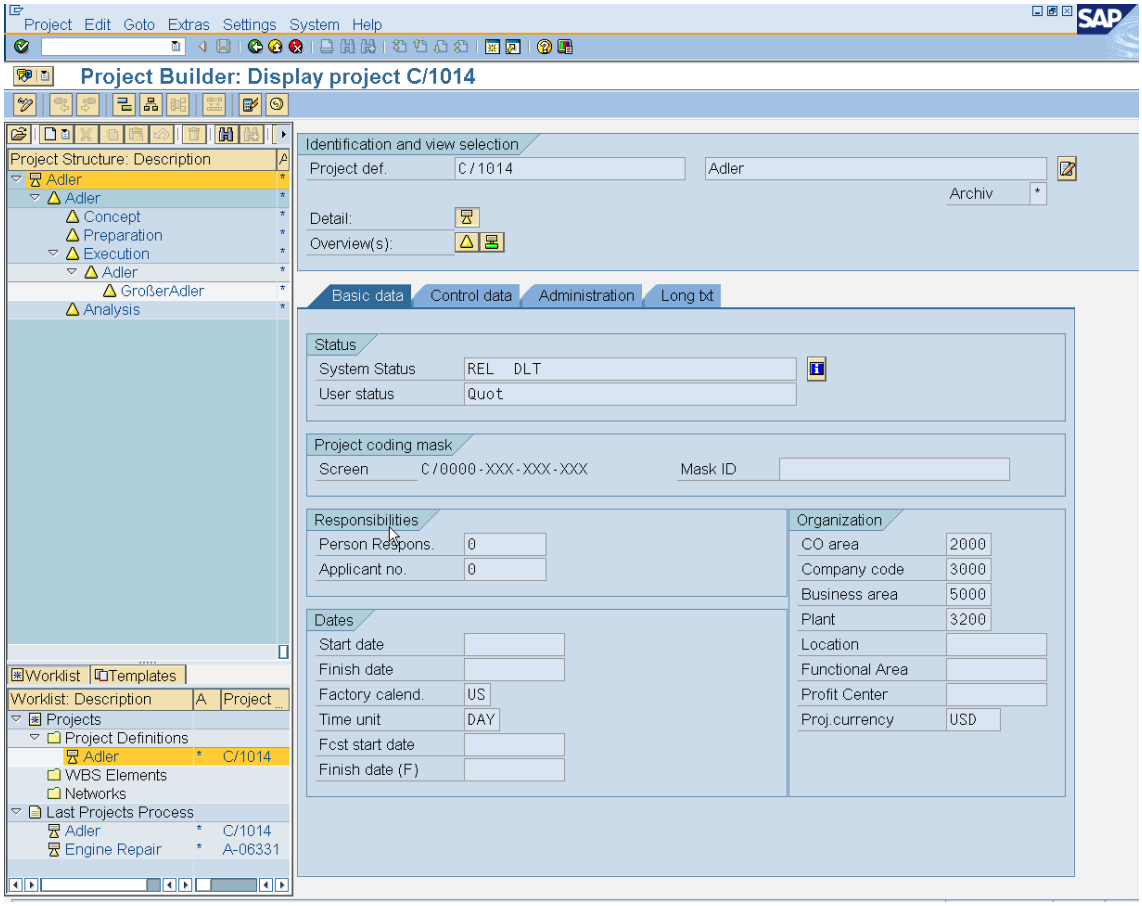


**Diagram 5: PROJECT BUILDER**

The following options are valid:

- The editing mode "Display" exists only.
- The indicator "Display deleted objects" must be set.
- The projects are generally displayed in the structural display.
- Objects can be selected in the worklist for the transaction /PBS/CJ20N, but they cannot be used as templates.
- You can define freely the number of displayed hierarchy levels.

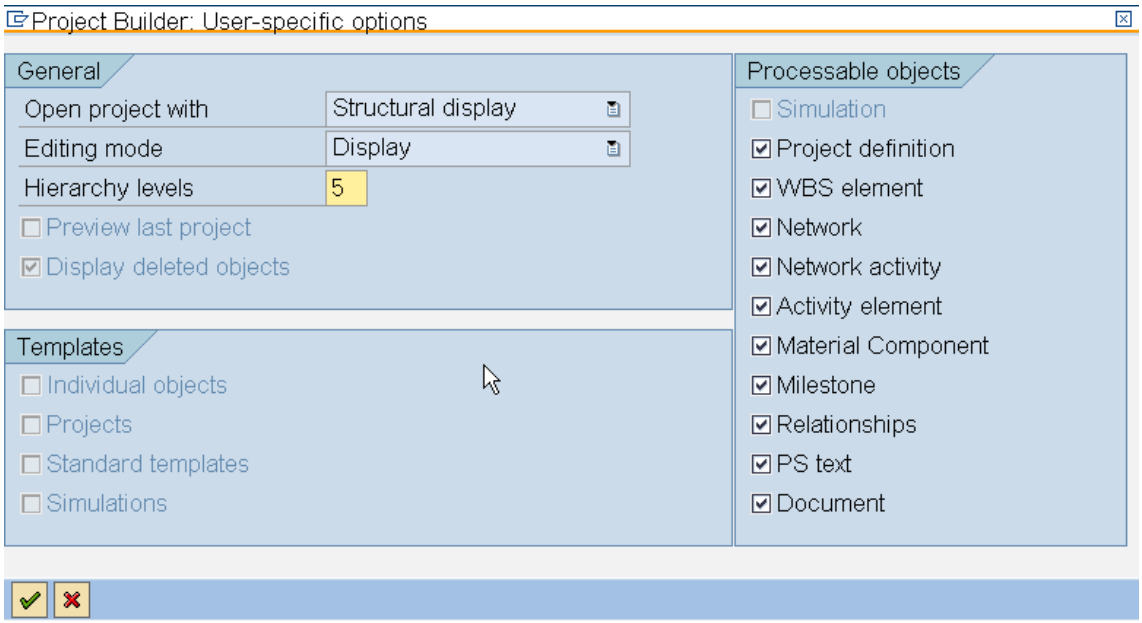


**Diagram 6: Project Builder, Options**

The worklist of transaction /PBS/CJ20N is managed independently of the worklist of transaction CJ20N.

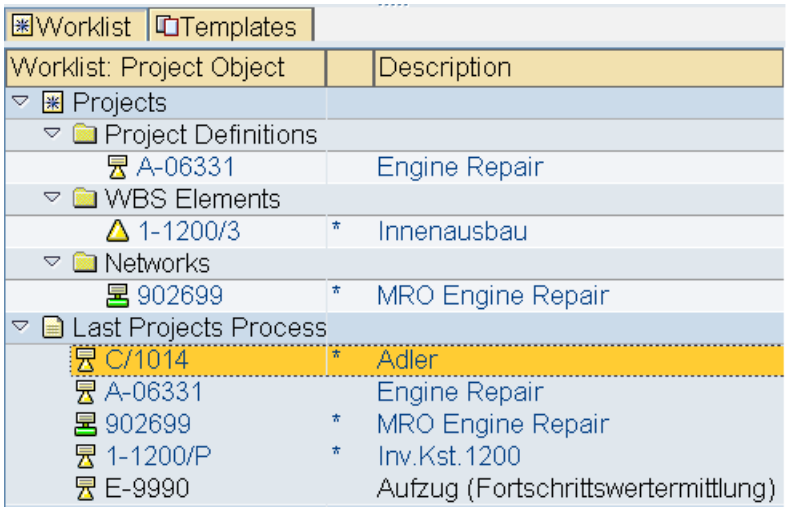


**Diagram 7: Project Builder, Worklist**

The display of the worklist is extended by the column archive indicator (A).

As described in Chapter 2.5, the displayed project is shown to be located either in the PBS archive add on CPS or in the SAP database. If it is located in the archive, the column contains "*". Otherwise it is empty.

If the displayed data has a deletion flag, it is displayed in color in the worklist.

If a project is listed in the database as well as in the archive, the project is always displayed without an archive indicator in the list of the worklist.

## 2.6 Reporting in the PBS archive add on CPS

Within the scope of reporting, all programs of the PBS archive add on CPS use the logical database /PBS/PSI for the selection of data in order to subsequently display the result set structured and sorted in a list.

All information from the archives must be available to the logical database in order to build the project structures and the integration of assigned data from Controlling (CO), Plant Maintenance (PM), and Production Planning (PP).

Response times depend on the storage system and the system configuration, but also on the complexity of the projects. In some cases, access to archived data takes place about as fast as on the SAP database.

Queries on mass data should, however, be executed in the background. Runtime errors will occur if the data volume to be processed exceeds the storage capacity. It is therefore the responsibility of the user to choose the selection criteria in such a way that the result set can be sorted, filtered, and grouped. The restriction of the selection and settings in the DB profile of the report should be observed when doing this.

## 2.7 Display of archived Project Line Items

The transaction CJI3 displays project line items within the information system, which means documents from the Tables COBK and COEP.

Both tables can be archived via the SAP archiving objects CO_ITEM and PS_PROJECT.

The archiving object CO_ITEM data is displayed using the PBS archive add on CCO. The archiving object PS_PROJECT data is displayed using the PBS archive add on CPS.

We recommend using both products. All line items can be archived using CO_ITEM before the project itself is archived. Otherwise all line items for a project are archived during the archiving with PS_PROJECT.

An index for the documents that have been archived with PS_PROJECT is created to correctly display the line items actual costs using the PBS archive add on CCO transaction.

If the PBS archive add on CPS is used without CCO, the line items actual costs are displayed via the transaction /PBS/CPS_CJI3. In this case the data is only read from the archiving object PS_PROJECT.

If the PBS archive add on CCO and the PBS archive add on CPS are used, the PBS archive add on CCO software is leading. If you now call the transaction /PBS/CPS_CJI3, a branch is made to the PBS archive add on CCO software in the background and the archived line items are determined via the CCO indices.

The same procedure also applies for the transactions /PBS/CJI4 and /PBS/CPS_CJI4 to display projects line items planned costs, which means documents from Tables COBK and COEJ.

# 2.8 Hierarchy Report

Hierarchy reports are drilldown reports, which were generated based on SAP originals (see Administrator manual; chapter 7).

The logical database /PBS/PSI, which provides the data from the database and from the archives to the main memory, is used for the data selection. The same rule applies here as for the SAP original transaction: the bigger the data volume, the longer the response time.

Transaction /PBS/CJE0 is used to execute a selected report in order to display the selected report data in dialog-based lists.

In order to avoid runtime problems when executing hierarchy reports via transaction /PBS/CJE0, the data selection can be disconnected from the data display. This way, a new selection of the data does not always need to be performed when executing a report but a backup copy of the selection is used for display if required.

The selection and backup of the data is done in the background via transaction /PBS/CJEB. For this purpose, the selection criteria have been saved as variants to the report.

## 2.8.1 Execute Hierarchy Report

The call of transaction /PBS/CJE0 shows at first a list of the existing PBS hierarchy reports.

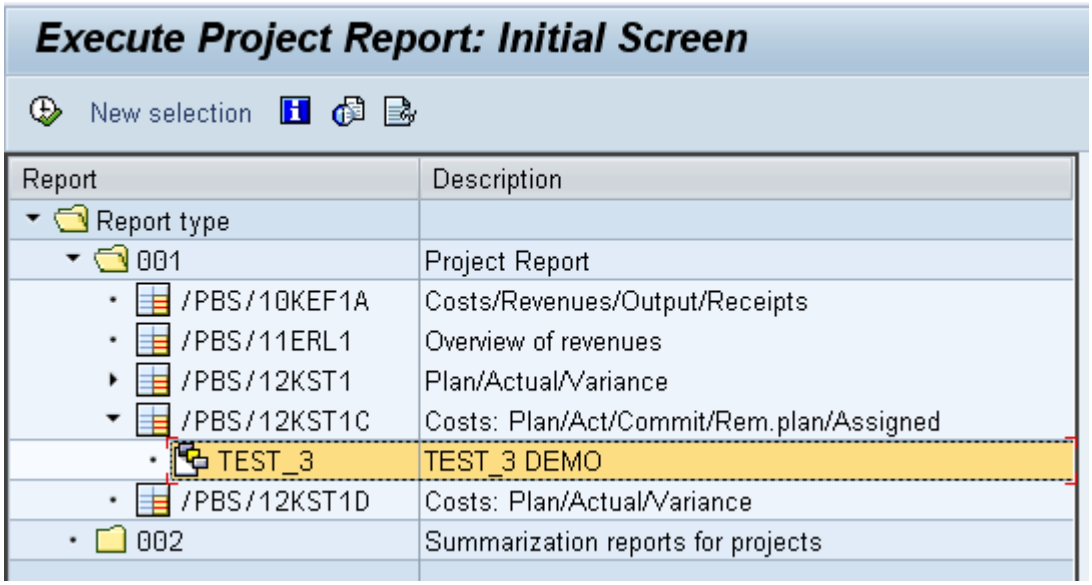


**Diagram 8: /PBS/CJE0: Overview PS drilldown reports**

The selection of a hierarchy report shows the corresponding selection screen with the PBS parameter. A new selection is triggered.

During the selection of a variant and function , you can choose between the new selection and the backup copy of the report data if necessary.

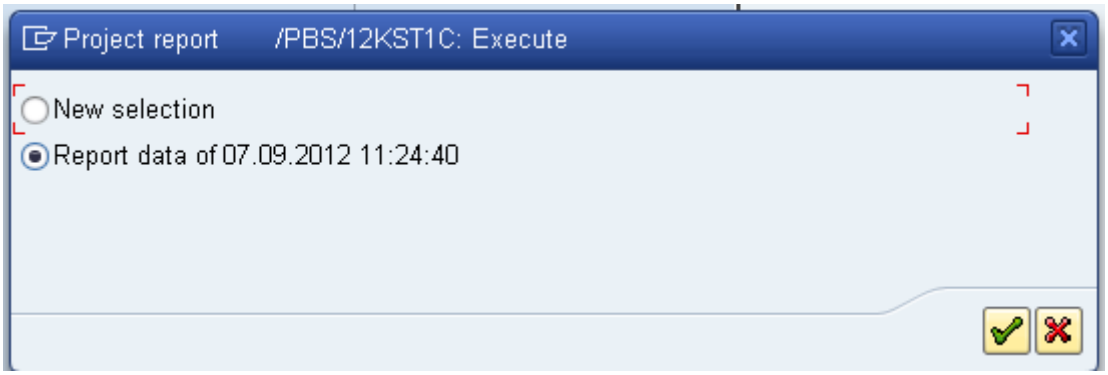


**Diagram 9: Choice of selection time**

The report data with frozen report data is displayed faster than for a new selection as the load on the database server is small and the archive does not have to be accessed.

## 2.8.2 Background Processing, Hierarchy Report

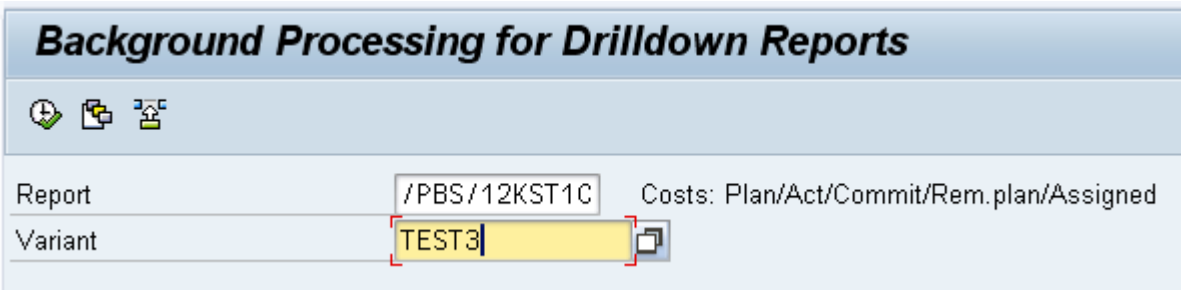


**Diagram 10: Selection of the hierarchy report for the background processing**

Via transaction /PBS/CJEB, variants for the hierarchy report can be maintained and jobs can be scheduled or started immediately.

The selection of the variant maintenance ( ) is used to process the variant for the generated report of the selected hierarchy report.

It should be determined whether a new selection has to be made or an already existing backup copy has to be read.

New backup copies of the report data and/or a print output as drilldown or detail list are created during the backup processing.

To improve the performance of the online transaction the option read mode = “new selection” and the selection of function “Rebuild frozen report data” are required.

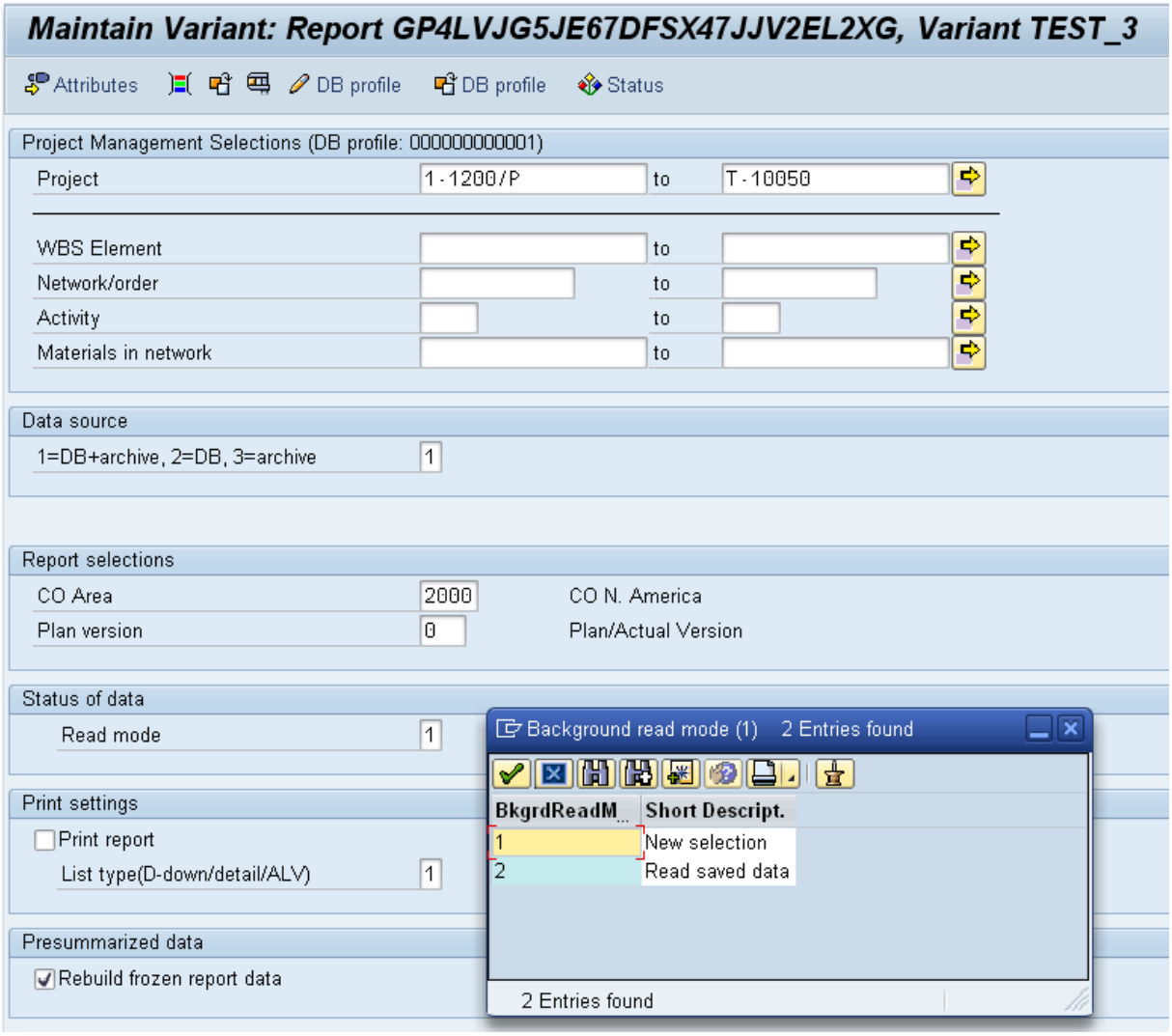


**Diagram 11: Selection options for the background processing**

The selection of function enables the scheduling and monitoring of a report in the background.

Function ( ) executes the data selection online and creates a backup copy of the report data and/or a print list according to the selection criteria. This function will show the same performance problems during a new selection as during the execution of the new selection of the data via transaction /PBS/CJE0.

## 2.8.3 Deleting frozen data, Hierarchy Report

If frozen data is created in a drilldown report, it cannot then be deleted in the executed report.

The transaction /PBS/CJEY is available to delete report data from the backup area.

# 3 Search helps

From release 4.6C elementary search helps for the fields project definition, WBS element and network in the PBS archive add on CPS are available. In comparison to the original SAP search helps, the PBS search helps determine the default values not only from the database but also from the archive. They are marked with the indicator (*).

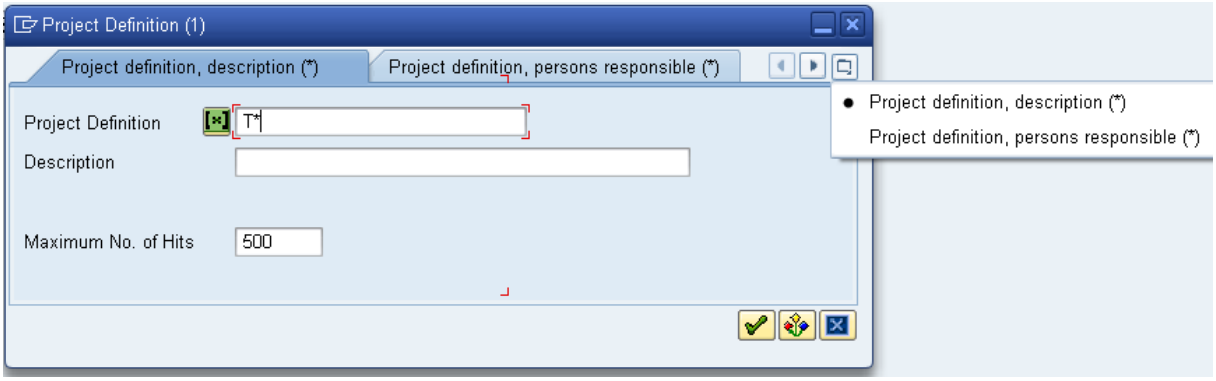


**Diagram 12**: **Search helps for the project definition, example with transaction /PBS/CJ08**

The selection criteria for the default list can be entered in the search help of the PBS archive add on CPS. As a last selection criterion the data source can be selected in a popup.

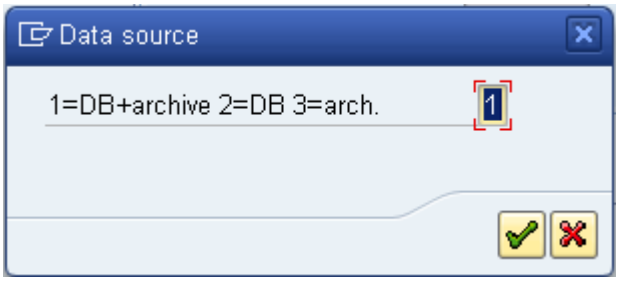


**Diagram 13: Popup for data source selection**

If the program does not find a PBS index to determine the default values from the archive with the selection criteria, a message is displayed with the proposal to read the SAP archive sequentially. However, this can take some time.

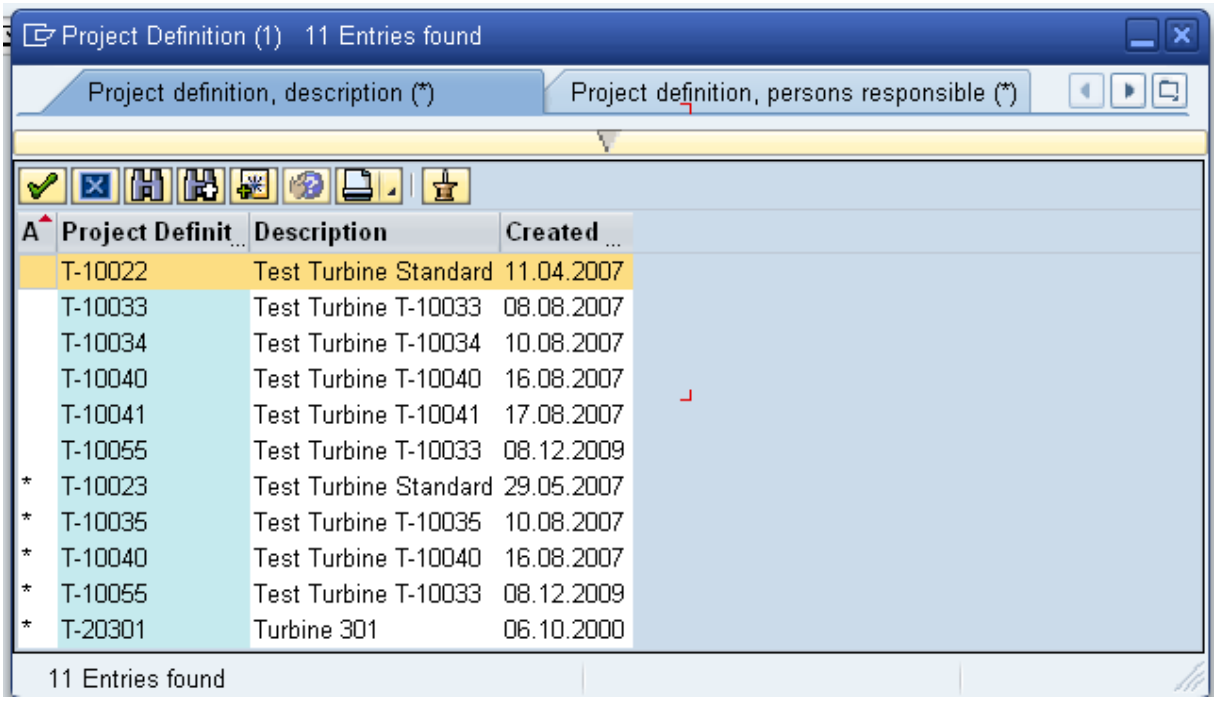
Project Definition (1) 11 Entries found
Project definition, description (*)
Project definition, persons responsible (*)
A
Project Definit...
Description
Created ...
T-10022 Test Turbine Standard 11.04.2007
T-10033 Test Turbine T-10033 08.08.2007
T-10034 Test Turbine T-10034 10.08.2007
T-10040 Test Turbine T-10040 16.08.2007
T-10041 Test Turbine T-10041 17.08.2007
T-10055 Test Turbine T-10033 08.12.2009
* T-10023 Test Turbine Standard 29.05.2007
* T-10035 Test Turbine T-10035 10.08.2007
* T-10040 Test Turbine T-10040 16.08.2007
* T-10055 Test Turbine T-10033 08.12.2009
* T-20301 Turbine 301 06.10.2000
11 Entries found

**Diagram 14: Default list**